Complete Summary

GUIDELINE TITLE

Practice guideline for the treatment of patients with Alzheimer's disease and other dementias.

BIBLIOGRAPHIC SOURCE(S)

American Psychiatric Association (APA). Practice guideline for the treatment of patients with Alzheimer's disease and other dementias. Arlington (VA): American Psychiatric Association (APA); 2007 Oct. 85 p. [554 references]

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: American Psychiatric Association (APA). Practice guideline for the treatment of patients with Alzheimer's disease and other dementias of late life. Am J Psychiatry 1997 May;154(5 Suppl):1-39. [243 references]

** REGULATORY ALERT **

FDA WARNING/REGULATORY ALERT

Note from the National Guideline Clearinghouse: This guideline references a drug(s) for which important revised regulatory and/or warning information has been released.

- June 17, 2008, Antipsychotics (conventional and atypical]): The U.S. Food and Drug Administration (FDA) notified healthcare professionals that both conventional and atypical antipsychotics are associated with an increased risk of mortality in elderly patients treated for dementia-related psychosis. The prescribing information for all antipsychotic drugs will now include information about the increased risk of death in the BOXED WARNING and WARNING sections.
- September 17, 2007, Haloperidol (Haldol): Johnson and Johnson and the U.S. Food and Drug Administration (FDA) informed healthcare professionals that the WARNINGS section of the prescribing information for haloperidol has been revised to include a new Cardiovascular subsection.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

- Alzheimer's disease
- Other dementias, including:
  - Vascular dementia
  - Parkinson's disease
  - Dementia with Lewy bodies
  - Frontotemporal dementia spectrum disorders (Pick's disease or frontotemporal lobar degeneration)

GUIDELINE CATEGORY

Management
Treatment

CLINICAL SPECIALTY

Neurology
Psychiatry

INTENDED USERS

Allied Health Personnel
Physicians

GUIDELINE OBJECTIVE(S)

- To assist the psychiatrist in caring for a patient with dementia
- To summarize data to inform the care of patients with dementia of the Alzheimer's type (referred to here as Alzheimer's disease) and other dementias, including vascular dementia, Parkinson's disease, dementia with Lewy bodies, and the frontotemporal dementia spectrum disorders

TARGET POPULATION

Patients with dementia of the Alzheimer's type and other dementias, including vascular dementia, Parkinson's disease, dementia with Lewy bodies, and the frontotemporal dementia spectrum disorders

The guideline does not purport to review research or provide recommendations for every dementia associated with general medical conditions, such as human immunodeficiency virus (HIV) infection, Huntington's disease, head trauma, structural lesions, or endocrine and metabolic disturbances. Nonetheless, many of the recommendations regarding the management of cognitive and functional changes and neuropsychiatric complications apply to dementia in general.

INTERVENTIONS AND PRACTICES CONSIDERED

Evaluation/Management

1. Thorough psychiatric, neurological, and general medical evaluation
2. Identification and treatment of conditions that may contribute to dementia
3. Ongoing assessment and follow-up, including evaluation of risk to self and others, potential for aggression, living conditions, safety of environment, adequacy of supervision, and evidence of neglect or abuse
4. Information for patient and family about risk of vehicular accidents and counseling on driving cessation
5. Patient and family education

Specific Psychotherapies/Psychosocial Treatments

1. Behavior-oriented approaches
2. Stimulation-oriented approaches (e.g., recreational activities or therapies, music therapy, dance therapy, art therapy, exercise, multisensory stimulation, simulated presence, aromatherapy)
3. Emotion-oriented approaches (e.g., supportive psychotherapy, reminiscence therapy, validation therapy, sensory integration, and simulated presence therapy)
4. Cognition-oriented approaches (reality orientation, cognitive remediation, and skills training)

Pharmacologic Treatments

1. Treatments for cognitive and functional losses
    - Cholinesterase inhibitors: donepezil, rivastigmine, galantamine
    - Memantine
    - Agents proposed for the treatment of cognitive decline and dementia but not recommended for routine use because adequate data are lacking or data show no benefit: aspirin and other non-steroidal anti-inflammatory drugs (NSAIDs), estrogen supplementation, alpha-tocopherol (vitamin E)
2. Treatments for psychosis and agitation
    - Antipsychotic medications
    - Benzodiazepines (lorazepam, oxazepam, diazepam, clonazepam)
    - Agents proposed for the treatment of agitation in patients with dementia but not recommended for routine use because adequate data are lacking or data show no benefit: anticonvulsants, trazodone, selective serotonin reuptake inhibitors (SSRIs), lithium carbonate, beta blockers
3. Treatments for depression
    - Antidepressants: cyclic antidepressants, SSRIs, and MAOIs

- Dopaminergic agents such as psychostimulants
- Electroconvulsive therapy (ECT)

4. Treatments for sleep disturbance
    - Trazodone, zolpidem, zaleplon
    - Benzodiazepines, diphenhydramine, antipsychotics

MAJOR OUTCOMES CONSIDERED

- Mortality
- Level of cognitive performance
- Patient's level of function (activities of daily living)
- Patient comfort
- Disruption to families and caregivers
- Rate of disease progression (rate of functional decline)
- Time to institutionalization
- Duration of response to somatic therapy
- Frequency of side effects from drug therapy

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Relevant literature was identified through a computerized search of MEDLINE, using PubMed, for the period from 1994 to 2004. By using the key words "dementia," "dementias," "Alzheimer," "Alzheimer's," "Pick disease," or "mild cognitive impairment," a total of 79,510 citations were found. Limiting the search to clinical trials, practice guidelines, and meta-analyses published in English that included abstracts yielded 2,679 articles, which were screened by using title and abstract information. To locate citations relevant to Part B of the guideline, the above search terms were also used to identify review articles having medical subject heading (MeSH) subheadings of classification, diagnosis, epidemiology, etiology, genetics, or mortality. This search yielded 9,840 citations, of which 4,816 were published in English with abstracts and were screened as described above. To locate other systematic reviews, a search of the Cochrane database was also conducted using the search term "dementia." Additional, less formal literature searches were conducted by American Psychiatric Association (APA) staff and individual members of the Work Group on Alzheimer's Disease and Other Dementias to identify references on related topics as well as articles published during the guideline development process.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses
Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

This practice guideline was developed under the auspices of the American Psychiatric Association (APA) Steering Committee on Practice Guidelines. The development process is detailed in a document entitled "APA Guideline Development Process," which is available from the APA Department of Quality Improvement and Psychiatric Services. Key features of this process include the following:

- A comprehensive literature review
- Development of evidence tables
- Initial drafting of the guideline by a work group that included psychiatrists with clinical and research expertise in dementia
- Production of multiple revised drafts with widespread review; 22 organizations and 64 individuals submitted significant comments.
- Approval by the APA Assembly and Board of Trustees
- Planned revisions at regular intervals

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Each recommendation is identified at falling into one of three categories of endorsement, indicated by a bracketed Roman numeral following the statement. The three categories represent varying levels of clinical confidence regarding the recommendation:

[I] Recommended with substantial clinical confidence.

[II] Recommended with moderate clinical confidence.

[III] May be recommended on the basis of individual circumstances.

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Iterative guideline drafts were reviewed by the Steering Committee, other experts, allied organizations, American Psychiatric Association (APA) members, and the APA Assembly and Board of Trustees.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Each recommendation is identified as falling into one of three categories of endorsement, based on the level of confidence regarding the recommendation, as indicated by a bracketed Roman numeral after the statement. Definitions of the categories of endorsement are presented at the end of the "Major Recommendations" field.

General Treatment Principles and Alternatives

Patients with dementia display a broad range of cognitive impairments and neuropsychiatric symptoms that can cause significant distress to themselves and caregivers. As a result, individualized and multimodal treatment plans are required [**I**]. Dementia is usually progressive, and treatment must evolve with time in order to address newly emerging issues [**I**]. At each stage the psychiatrist should be vigilant for symptoms likely to be present, should identify and treat co-occurring psychiatric and medical conditions, and should help patients and families anticipate future symptoms and the care likely to be required [**I**].

1. **Psychiatric Management**

   The treatment of patients with dementia should be based on a thorough psychiatric, neurological, and general medical evaluation of the nature and cause of the cognitive deficits and associated noncognitive symptoms, in the context of a solid alliance with the patient and family [**I**]. It is particularly critical to identify and treat general medical conditions, most notably delirium, that may be responsible for or contribute to the dementia or associated neuropsychiatric symptoms [**I**].

   Ongoing assessment includes periodic monitoring of the development and evolution of cognitive and noncognitive psychiatric symptoms and their response to intervention [**I**]. In order to offer prompt treatment, enhance

safety, and provide timely advice to the patient and family, it is generally necessary to see patients in routine follow-up at least every 3 to 6 months [**II**]. More frequent visits (e.g., up to once or twice a week) or even psychiatric hospitalization may be required for patients with acute, complex, or potentially dangerous symptoms or for the administration of specific therapies [**I**]. Recommended assessments include evaluation of suicidality, dangerousness to self and others, and the potential for aggression, as well as evaluation of living conditions, safety of the environment, adequacy of supervision, and evidence of neglect or abuse [**I**].

All patients and families should be informed that even mild dementia increases the risk of vehicular accidents [**I**]. Mildly impaired patients should be advised to limit their driving to safer situations or to stop driving [**I**], and moderately impaired patients should be instructed not to drive [**I**]. Advice about driving cessation should also be communicated to family members, as the implementation of the recommendation often falls on them [**I**]. Relevant state laws regarding notification should be followed [**I**].

Important aspects of psychiatric management include educating patients and families about the illness, its treatment, and sources of additional care and support (e.g., support groups, respite care, nursing homes, and other long-term-care facilities) and advising patients and their families of the need for financial and legal planning due to the patient's eventual incapacity (e.g., power of attorney for medical and financial decisions, an up-to-date will, and the cost of long-term care) [**I**].

2. **Specific Psychotherapies and Other Psychosocial Treatments**

In addition to the general psychosocial interventions subsumed under psychiatric management, a number of specific interventions are appropriate for some patients. Few of these treatments have been subjected to double-blind randomized evaluation, but some research, along with clinical practice, supports their effectiveness. Behavior-oriented treatments are used to identify the antecedents and consequences of problem behaviors and attempt to reduce the frequency of behaviors by directing changes in the environment that alter these antecedents and consequences. Behavioral approaches have not been subjected to large randomized clinical trials but are supported by small trials and case studies and are in widespread clinical use [**II**]. Stimulation-oriented treatments, such as recreational activity, art therapy, music therapy, and pet therapy, along with other formal and informal means of maximizing pleasurable activities for patients, have modest support from clinical trials for improving behavior, mood, and, to a lesser extent, function, and common sense supports their use as part of the humane care of patients [**II**]. Among the emotion-oriented treatments, supportive psychotherapy can be employed to address issues of loss in the early stages of dementia [**II**]. Reminiscence therapy has some modest research support for improvement of mood and behavior [**III**]; validation therapy and sensory integration have less research support [**III**]; none of these modalities has been subjected to rigorous testing. Cognition-oriented treatments, such as reality orientation, cognitive retraining, and skills training focused on specific cognitive deficits, are unlikely to have a persistent benefit and have been associated with frustration in some patients [**III**].

3. **Special Concerns Regarding Somatic Treatments for Elderly Patients and Patients With Dementia**

Medications are effective in the management of some symptoms associated with dementia, but they must be used with caution in this patient population [**I**]. Because age may alter the absorption, distribution, metabolism, and elimination of many medications, elderly individuals may be more sensitive to their effects. General medical conditions and use of more than one medication may further affect the pharmacokinetics of many medications. In addition, patients with dementia may be more likely to experience certain medication adverse effects, including anticholinergic effects, orthostasis, sedation, and parkinsonism. Finally, symptoms of dementia may alter medication adherence in ways that are unsafe. Consequently, when using pharmacotherapy in patients with dementia, low starting doses, small increases in dose, and long intervals between dose increments may be needed, in addition to ensuring that a system is in place that can enhance proper medication adherence [**I**].

4. **Treatment of Cognitive Symptoms**

Three cholinesterase inhibitors—donepezil, rivastigmine, and galantamine—are approved by the U.S. Food and Drug Administration (FDA) for treatment of mild to moderate Alzheimer's disease, and donepezil has been approved by the FDA for severe Alzheimer's disease. These medications have similar rates of adverse effects and have been shown to lead to modest benefits in a substantial minority of patients (i.e., 30%–40% in clinical trials). These medications should be offered to patients with mild to moderate Alzheimer's disease after a thorough discussion of their potential risks and benefits [**I**], and they may be helpful for patients with severe Alzheimer's disease [**II**].

Cholinesterase inhibitors should be considered for patients with mild to moderate dementia associated with Parkinson's disease [**I**]. Only rivastigmine has been approved by the FDA for this indication, but there is no reason to believe the benefit is specific to this cholinesterase inhibitor.

Cholinesterase inhibitors can be considered for patients with dementia with Lewy bodies [**II**].

The constructs of mild cognitive impairment and vascular dementia are evolving and have ambiguous boundaries with Alzheimer's disease. The efficacy and safety of cholinesterase inhibitors for patients with these disorders are uncertain; therefore, no specific recommendation can be made at this time, although individual patients may benefit from these agents [**II**].

Memantine, a noncompetitive *N*-methyl-D-aspartate (NMDA) antagonist, which has been approved by the FDA for use in patients with moderate and severe Alzheimer's disease, may provide modest benefits and has few adverse effects; thus, it may be considered for such patients [**I**]. There is some evidence of its benefit in mild Alzheimer's disease [**III**] and very limited evidence of its benefit in vascular dementia [**I**].

Vitamin E (alpha-tocopherol) is no longer recommended for the treatment of cognitive symptoms of dementia because of limited evidence for its efficacy as well as safety concerns [**II**].

Nonsteroidal anti-inflammatory agents (NSAIDs), statin medications, and estrogen supplementation (with conjugated equine estrogens) have shown a lack of efficacy and safety in placebo-controlled trials in patients with Alzheimer's disease and therefore are not recommended [**I**].

5. **Treatment of Psychosis and Agitation**

Psychosis, aggression, and agitation are common in patients with dementia and may respond to similar therapies. When deciding if treatment is indicated, it is critical to consider the safety of the patient and those around him or her [**I**]. A careful evaluation for general medical, psychiatric, environmental, or psychosocial problems that may underlie the disturbance should be undertaken [**I**]. If possible and safe, such underlying causes should be treated first [**I**]. If this does not resolve the symptoms, and if they do not cause significant danger or distress to the patient or others, such symptoms are best treated with environmental measures, including reassurance and redirection [**I**]. For agitation, some of the behavioral measures discussed in Item 2 above may also be helpful [**II**]. If these measures are unsuccessful or the behaviors are particularly dangerous or distressing, then the symptoms may be treated judiciously with one of the agents discussed in the following paragraphs [**II**]. The use of such agents should be reevaluated and their benefit documented on an ongoing basis [**I**].

On the basis of good evidence, antipsychotic medications are recommended for the treatment of psychosis in patients with dementia [**II**] and for the treatment of agitation [**II**]. These medications have also been shown to provide modest improvement in behavioral symptoms in general [**I**]. Evidence for the efficacy of these agents is based mostly on 6–12-week trials in nursing home residents and outpatients. There is limited research on their use beyond 12 weeks, but considerable clinical experience supports this practice [**II**]. Evidence for a difference in efficacy and safety among antipsychotic medications is limited. Antipsychotic medications as a group are associated with a number of severe adverse events, including increased risks for death, cerebrovascular accidents, tardive dyskinesia, neuroleptic malignant syndrome, hyperlipidemia, weight gain, diabetes mellitus, sedation, parkinsonism, and worsening of cognition. Thus, they must be used with caution and at the lowest effective dosage [**I**], after considering the risks of not treating the psychiatric symptoms [**I**]. Patients and families should be advised about potential benefits and risks of antipsychotic agents, particularly the risk of mortality [**I**]. Second-generation (atypical) antipsychotics currently have a black box warning for increased risk of mortality in elderly patients; recent data suggest that first-generation (typical) agents carry at least a similar risk. High-potency agents tend to cause akathisia and parkinsonian symptoms; low-potency agents tend to cause sedation, confusion, delirium, postural hypotension, and peripheral anticholinergic effects. The decision of which antipsychotic to use is based on the relationship between the side-effect profile and the characteristics of the individual patient [**I**].

Data demonstrating benefit from benzodiazepines are modest, but benzodiazepines occasionally have a role in treating patients with prominent anxiety [**III**] or on an as-needed basis for patients with infrequent episodes of agitation or for those who require sedation for a procedure such as a tooth extraction or a diagnostic examination [**II**]. Adverse effects of benzodiazepines include sedation, worsening cognition, delirium, increased risk of falls, and worsening of breathing disorders. Lorazepam and oxazepam, which have no active metabolites, are preferable to agents with a longer half-life such as diazepam or clonazepam [**III**].

There is minimal evidence for the efficacy of anticonvulsants, lithium, and beta-blockers for the treatment of psychosis or agitation in dementia, and these medications have significant adverse effects; therefore, they are generally not recommended except for patients for whom other treatments have failed [**III**]. The antidepressant trazodone and the selective serotonin reuptake inhibitors (SSRIs) are also not well studied for symptoms other than depression but may be appropriate for nonpsychotic patients with agitation, especially for patients with mild agitation or prior sensitivity to antipsychotic medications [**III**].

6. Treatment of Depression

Depression is common in patients with dementia. Patients with depression should be evaluated for suicide risk [**I**]. Depressed mood may respond to improvements in the patient's living situation or to stimulation-oriented treatments [**II**]. Although evidence for antidepressant efficacy in patients with dementia and depression is mixed, clinical consensus supports a trial of an antidepressant to treat clinically significant, persistent depressed mood [**II**]. The choice among agents is based on the side-effect profile of specific medications and the characteristics of the individual patient [**I**]. SSRIs may be preferred because they appear to be better tolerated than other antidepressants [**II**]. Bupropion, venlafaxine, and mirtazapine may also be effective [**II**]. Agents with substantial anticholinergic effects (e.g., amitriptyline, imipramine) should be avoided [**I**]. Despite the lack of research data, clinical experience suggests that unilateral electroconvulsive therapy (ECT) may be effective for patients who do not respond to pharmacological agents [**II**].

Treatments for apathy are not well supported, but psychostimulants, bupropion, bromocriptine, and amantadine may be helpful [**III**]. Psychostimulants are also sometimes useful in the treatment of depression in patients with significant general medical illness [**III**].

7. Treatment of Sleep Disturbances

Sleep disturbances are common in patients with dementia. Interventions include maintaining daytime activities and giving careful attention to sleep hygiene [**II**]. Pharmacological intervention could be considered when other approaches have failed [**II**]. If a patient also requires medication for another psychiatric condition, an agent with sedating properties, given at bedtime, could be selected [**I**]. For primarily treating the sleep disturbance, medications with possible effectiveness include trazodone, zolpidem, or

zaleplon [**III**], but there are few data on the efficacy of specific agents. Benzodiazepines are not recommended for other than brief use because of risks of daytime sedation, tolerance, rebound insomnia, worsening cognition, falls, disinhibition, and delirium [**II**]. Diphenhydramine is not recommended because of its anticholinergic properties [**II**]. Antipsychotic medications should not be used solely for the purpose of treating sleep disturbances [**I**].

8. **Special Issues for Long-Term Care**

Many patients eventually require long-term-care placement; approximately two-thirds of nursing home patients have dementia. Care should be organized to meet the needs of patients, including those with behavioral problems [**I**]. Employing staff with knowledge and experience concerning dementia and the management of difficult behavior is important [**II**]. Special care units may offer more optimal care, although there is limited evidence that they achieve better outcomes than traditional units [**III**].

A particular concern is the use of physical restraints and medications to control disruptive behavior. Appropriate use of antipsychotic medications can relieve symptoms and reduce distress and can increase safety for patients, other residents, and staff [**I**]. However, their use may be associated with worsening cognitive impairment, oversedation, falls, tardive dyskinesia, and neuroleptic malignant syndrome, as well as with hyperlipidemia, weight gain, diabetes mellitus, cerebrovascular accidents, and death [**I**]. Thus, good clinical practice requires careful consideration and documentation of the indications and available alternatives, both initially and on a regular ongoing basis [**I**]. A dose decrease or discontinuation should be considered periodically for all patients who receive antipsychotic medications [**I**]. A structured education program for staff may help to both manage patients' behavior and decrease the use of these medications in nursing homes [**II**]. Physical restraints are rarely indicated and should be used only for patients who pose an imminent risk of physical harm to themselves or others [**I**]. Reasons for the use of physical restraints should be carefully documented [**I**]. The need for restraints can be decreased by environmental changes that decrease the risk of falls or wandering and by careful assessment and treatment of possible causes of agitation [**II**].

Definition of the Three Categories of Endorsement

[**I**] Recommended with substantial clinical confidence

[**II**] Recommended with moderate clinical confidence

[**III**] May be recommended on the basis of individual circumstances

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence supporting the recommendations is not specifically stated.

In order for the reader to appreciate the evidence base behind the guideline recommendations and the weight that should be given to each recommendation, the summary of treatment recommendations is keyed according to the level of confidence with which each recommendation is made (see "Major Recommendations"). Each rating of clinical confidence considers the strength of the available evidence and is based on the best available data. When evidence is limited, the level of confidence also incorporates clinical consensus with regard to a particular clinical decision. In the listing of cited references, each reference is followed by a letter code in brackets that indicates the nature of the supporting evidence, as follows:

[A] *Double-blind, randomized clinical trial*. A study of an intervention in which subjects are prospectively followed over time; there are treatment and control groups; subjects are randomly assigned to the two groups; both the subjects and the investigators are blind to the assignments.

[A-] *Randomized clinical trial*. Same as above, but not double-blind.

[B] *Clinical trial*. A prospective study in which an intervention is made and the results of that intervention are tracked longitudinally; study does not meet standards for a randomized clinical trial.

[C] *Cohort or longitudinal study*. A study in which subjects are prospectively followed over time without any specific intervention.

[D] *Case-control study*. A study in which a group of patients is identified in the present and information about them is pursued retrospectively or backward in time.

[E] *Review with secondary data analysis*. A structured analytic review of existing data, e.g., a meta-analysis or a decision analysis.

[F] *Review*. A qualitative review and discussion of previously published literature without a quantitative synthesis of the data.

[G] *Other*. Textbooks, expert opinion, case reports, and other reports not included above.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Effective treatment and management of patients with Alzheimer's disease and other dementias

POTENTIAL HARMS

Psychosocial Treatment

Short-term adverse emotional consequences have occasionally been reported with some psychosocial treatments. This is especially true of the cognitively oriented treatments, during which frustration, catastrophic reactions, agitation, and depression have been reported.

Pharmacological Treatment

Certain medication side effects pose particular problems for elderly patients and those with dementia; medications with these side effects must therefore be used judiciously. Anticholinergic side effects may be more burdensome for elderly patients owing to coexisting cardiovascular disease, prostate or bladder disease, or other general medical conditions. These medications may also lead to worsening cognitive impairment, confusion, or even delirium. Orthostasis is common in elderly patients because of decreased vascular tone and medication side effects. As a result, elderly patients, especially those with dementia, are more prone to falls and associated injuries. Medications associated with central nervous system sedation may worsen cognition, increase the risk of falls, and put patients with sleep apnea at risk for additional respiratory depression. Finally, elderly patients, especially those with Alzheimer's disease, Parkinson's disease, or dementia with Lewy bodies, are especially susceptible to extrapyramidal side effects.

Side effects of specific medications are discussed further in the original guideline document.

CONTRAINDICATIONS

CONTRAINDICATIONS

- Side effects occur infrequently with cholinesterase inhibitors, but bradycardia should be considered a relative contraindication to their use.
- The main contraindication to use of cholinesterase inhibitors is hypersensitivity to the individual drugs.
- Sleep apnea is a relative contraindication to the use of benzodiazepines or other agents that suppress respiratory drive.
- Selegiline use is considered contraindicated in combination with meperidine, selective serotonin reuptake inhibitors (SSRIs), or tricyclic antidepressants.

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- This guideline is not intended to be construed or to serve as a standard of medical care. Standards of medical care are determined on the basis of all clinical data available for an individual case and are subject to change as scientific knowledge and technology advance and patterns evolve. These parameters of practice should be considered guidelines only. Adherence to them will not ensure a successful outcome for every individual, nor should they be interpreted as including all proper methods of care or excluding other acceptable methods of care aimed at the same results. The ultimate judgment regarding a particular clinical procedure or treatment plan must be made by the psychiatrist in light of the clinical data presented by the patient and the diagnostic and treatment options available.
- This guideline assumes that the psychiatrist, neurologist, or primary care physician has evaluated the patient for treatable factors that may be causing or exacerbating the dementia and for general medical or other conditions that may affect its treatment and course.
- This guideline is intended to be inclusive and to cover the range of necessary treatments that might be used by a psychiatrist who provides or coordinates the overall care of the patient with dementia. Much of the emphasis of this practice guideline is on symptoms that are often referred to as "neuropsychiatric" or "psychiatric and behavioral" symptoms, terms that will be used interchangeably throughout this guideline. These symptoms are highly prevalent, cause significant morbidity, and can often be effectively treated; their evaluation and treatment usually rest upon knowledge acquired in general psychiatry training programs. Many patients also have co-occurring psychiatric symptoms that cannot be completely subsumed by one *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition, Text Revision (DSM-IV-TR) diagnostic category; distinct treatment of these symptoms or disorders may also be needed. In terms of the treatment of dementia, interventions to reduce or correct cognitive and functional deficits are expected to gain importance over time as new approaches are developed. Thus, the psychiatrist caring for a patient with dementia should consider, but need not be limited to, the treatments recommended in this practice guideline.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

End of Life Care
Living with Illness

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

American Psychiatric Association (APA). Practice guideline for the treatment of patients with Alzheimer's disease and other dementias. Arlington (VA): American Psychiatric Association (APA); 2007 Oct. 85 p. [554 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

1997 (revised 2007 Oct)

GUIDELINE DEVELOPER(S)

American Psychiatric Association - Medical Specialty Society

SOURCE(S) OF FUNDING

American Psychiatric Association (APA)

GUIDELINE COMMITTEE

Work Group on Alzheimer's Disease and Related Dementias

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

This practice guideline has been developed by psychiatrists who are in active clinical practice. In addition, some contributors are primarily involved in research or other academic endeavors. It is possible that through such activities some contributors have received income related to treatments discussed in this guideline. A number of mechanisms are in place to minimize the potential for producing biased recommendations due to conflicts of interest. Work group members are selected on the basis of their expertise and integrity. Any work group member or reviewer who has a potential conflict of interest that may bias (or appear to bias) his or her work is asked to disclose this to the Steering Committee on Practice Guidelines and the work group.

The Work Group on Alzheimer's Disease and Other Dementias reports the following potentially competing interests for the period January 2003 to December 2006:

- Dr. Rabins has received speaking fees from Pfizer, AstraZeneca, Janssen, Eli Lilly and Company, Forest Pharmaceuticals, Inc., and Wyeth Pharmaceuticals.
- Dr. Blacker reports no competing interests.
- Dr. Rovner has served on speakers bureaus for Pfizer and Forest Pharmaceuticals, Inc.
- Dr. Rummans has received a research grant from the Linse Bock Foundation.
- Dr. Schneider has received research or other grants from Abbott Laboratories, AstraZeneca, Forest Pharmaceuticals, Inc., Johnson & Johnson, Eli Lilly and Company, Novartis, Pfizer, and Myriad. Dr. Schneider has served on speakers bureaus or performed other work relating to continuing medical education for Abbott Laboratories, AstraZeneca, Forest Pharmaceuticals, Eli Lilly and Company, Solvay, Bristol-Myers Squibb, and Lundbeck. Dr. Schneider has served on advisory panels for Abbott Laboratories, AstraZeneca, Forest Pharmaceuticals, Inc., Johnson & Johnson, Eli Lilly and Company, and Novartis.
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GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: American Psychiatric Association (APA). Practice guideline for the treatment of patients with Alzheimer's disease and other dementias of late life. Am J Psychiatry 1997 May;154(5 Suppl):1-39. [243 references]

GUIDELINE AVAILABILITY

Electronic copies: Available from the American Psychiatric Association (APA) Web site.

Print copies: Available from the American Psychiatric Press, Inc (APPI), 1000 Wilson Boulevard, Suite 1825, Arlington, VA 22209-3901; (703) 907-7322; (800) 368-5777; fax (703) 907-1091.

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

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